

FROM SEWAGE SLUDGE TO PARK LAND

MONTREAL
GAZETTE

How Chicago is transforming
biosolids into green spaces.



MAGGIE DALEY PARK, CHICAGO / IMAGE COURTESY MWRD

1

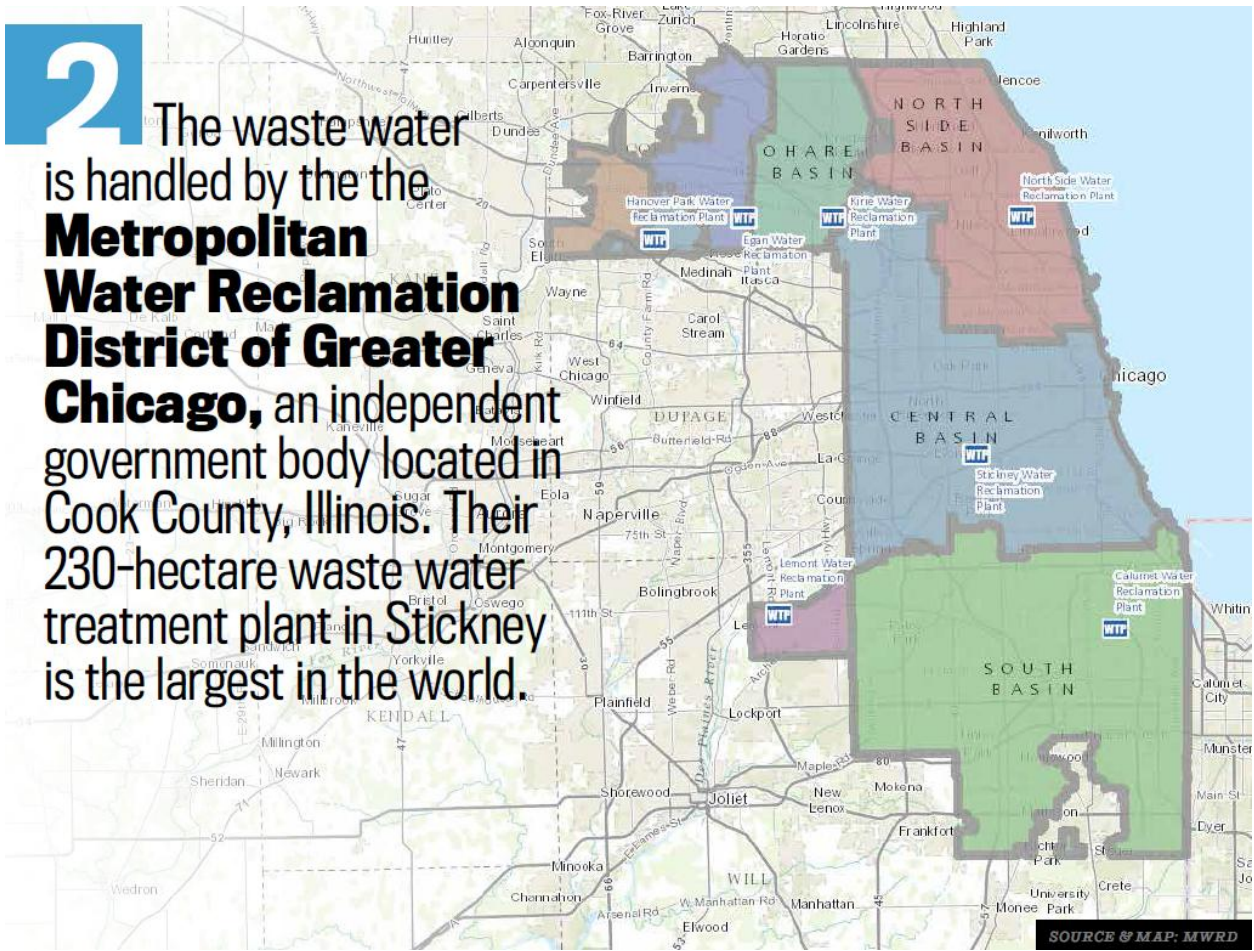
Waste water from the toilets, sinks and drains of homes and businesses in Chicago and 125 of its suburbs travels to one of seven waste water treatment plants via the sewer system. The solids are separated from the water. At this stage the solids are called **sludge**.



SOURCE: MWRD

2

The waste water is handled by the the **Metropolitan Water Reclamation District of Greater Chicago**, an independent government body located in Cook County, Illinois. Their 230-hectare waste water treatment plant in Stickney is the largest in the world.



3

The sludge is sent to temperature-controlled **digesters** where microorganisms break them down in a process similar to composting. The substance that emerges from this stage is called **biosolids**.



SOURCE & IMAGE: MWRD

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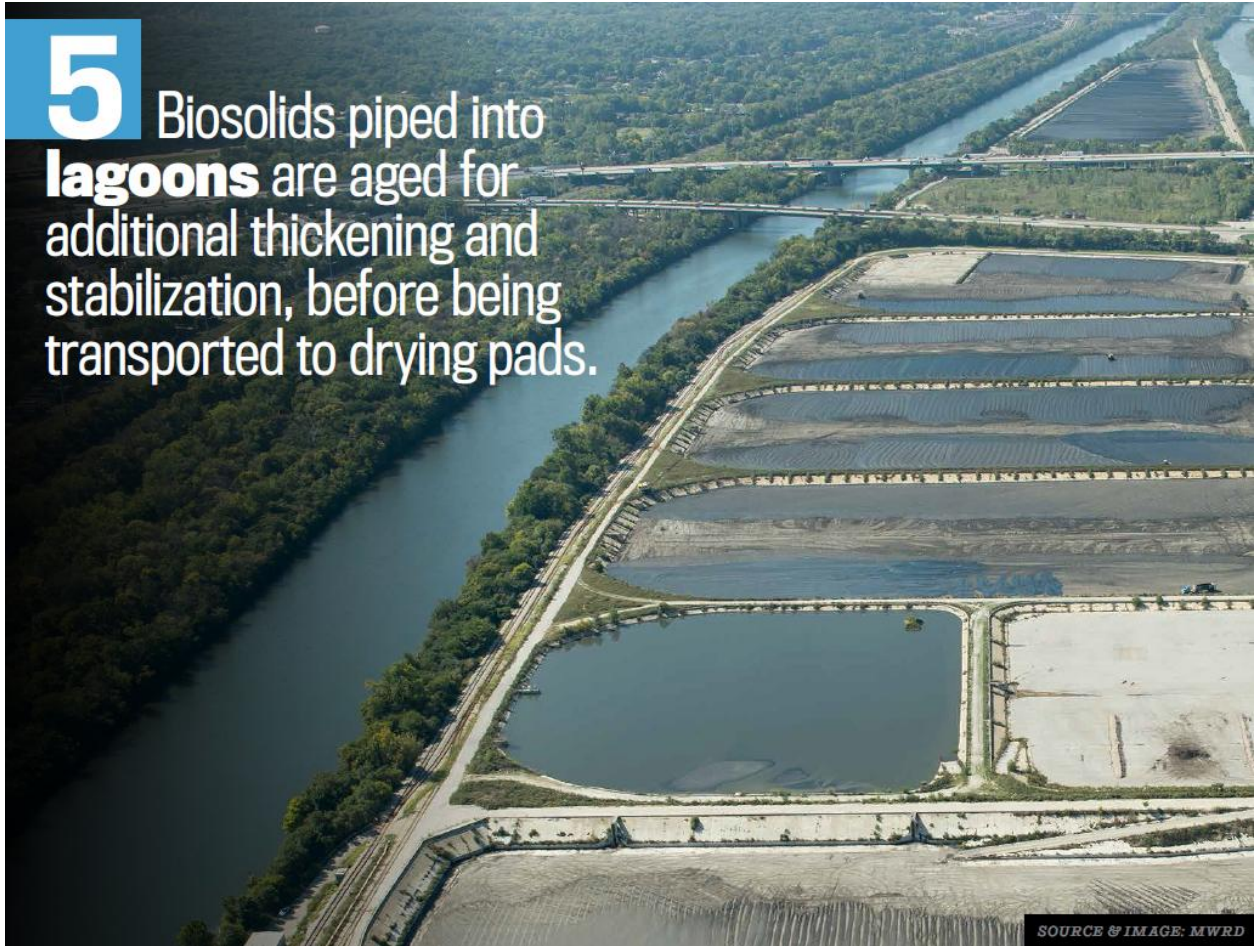
After digesting, the biosolids are piped to **centrifuges** which work like a washing machine, spinning at high speeds to dewater the biosolids. Those biosolids are then transported by train or truck to outdoor holding areas, while the biosolids that are not dewatered by centrifuges are piped into lagoons.



SOURCE & IMAGE: MWRD

5

Biosolids piped into **lagoons** are aged for additional thickening and stabilization, before being transported to drying pads.



SOURCE & IMAGE: MWRD

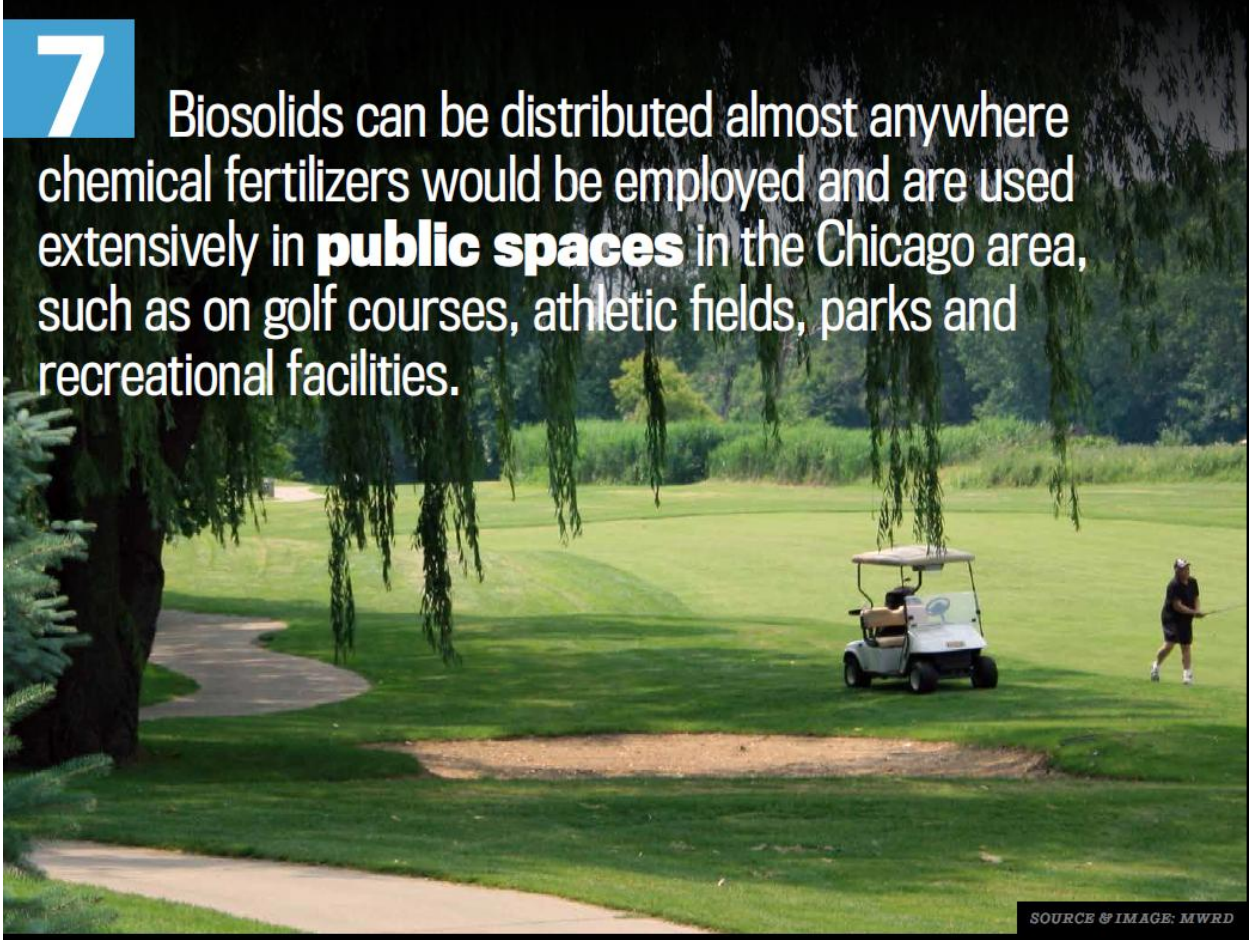


6 The biosolids are then air-dried on **paved pads** to achieve a total solids content of approximately 60%. Fecal Coliform tests are then taken to verify Class A EPA standards prior to shipment.

SOURCE & IMAGE: MWRD

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Biosolids can be distributed almost anywhere chemical fertilizers would be employed and are used extensively in **public spaces** in the Chicago area, such as on golf courses, athletic fields, parks and recreational facilities.



SOURCE & IMAGE: MWRD



8

Bisolids are also used in **non-public spaces** such as farm lands and former mine sites that are converted into agricultural land.

SOURCE: MWRD

9

The soil at Chicago's new 10-hectare **Maggie Daley Park** is mixed with biosolids. As a result the park's turf grass is healthier, more durable, and requires less maintenance.



A close-up photograph of several vibrant green leaves, likely from a plant like a peace lily, showing detailed vein patterns. The leaves are layered, with some in sharp focus and others slightly blurred in the background, creating a sense of depth. The lighting is soft and natural, highlighting the texture and color of the foliage.

10

The **public** will be able to purchase biosolids and composted biosolids in the near future. For now it is available for free at various Biosolids Processing Facilities.

SOURCE & IMAGE: MWRD